

What is claimed is:

1 1. A method of communicating data over a wireless link between a mobile
2 station and a wireless access system, comprising:

3 communicating, over the wireless link, control signaling for setting up a
4 packet-switched communications session between the mobile station and an endpoint;
5 communicating packets containing real-time data over the wireless link;

6 and

7 removing at least one protocol header associated with packet-switched
8 communications from each packet before communicating the packet over the wireless
9 link.

1 2. The method of claim 1, wherein removing the at least one protocol header
2 is performed by a radio network controller.

1 3. The method of claim 2, wherein removing the at least one protocol header
2 is performed by a GSM/EDGE radio access network (GERAN) radio network controller.

1 4. The method of claim 2, wherein removing the at least one protocol header
2 is performed by a UMTS radio access network (UTRAN) radio network controller.

1 5. The method of claim 1, wherein removing the at least one protocol header
2 is performed by the mobile station.

1 6. The method of claim 1, wherein removing the at least one protocol header
2 comprises removing one or more of an Internet Protocol header, User Datagram Protocol
3 header, and Real-Time Protocol header.

1 7. The method of claim 1, wherein communicating the packets containing
2 real-time data comprises communicating packets containing voice data.

1 14. The article of claim 13, wherein the instructions when executed cause the
2 system to:

3 send real-time data over the wireless link to an entity; and
4 send a second configuration message to an entity coupled over the
5 wireless link to enable construction of protocol headers for real-time data sent by the
6 system to the entity.

1 15. The article of claim 14, wherein the instructions when executed cause the
2 system to send a reconfiguration message to indicate a change in the packet-switched
3 communication session.

1 16. The article of claim 15, wherein the instructions when executed cause the
2 system to send the reconfiguration message to indicate addition of another party to the
3 packet-switched communications session.

1 17. A system for use in a wireless communication comprising:
2 an interface to a wireless link;
3 a storage module to store information relating to a packet-switched
4 communications session between a mobile station and another endpoint;
5 the interface to receive real-time data associated with the packet-switched
6 communications session; and
7 a controller adapted to construct at least one protocol header associated
8 with the packet-switched communications session based on the information and to
9 communicate packets containing the at least one protocol header and the real-time data.

1 18. The system of claim 17, wherein the controller is adapted to receive a
2 configuration message containing the information.

1 19. The system of claim 18, wherein the configuration message contains at
2 least one of Internet Protocol header information, User Datagram Protocol header
3 information, and Real-Time Protocol header information.

1 20. The system of claim 18, wherein the controller is adapted to transmit real-
2 time data that is part of the packet-switched communications session to an entity over the
3 wireless link.

1 21. The system of claim 20, wherein the controller is adapted to further
2 communicate a second configuration message to the entity, the second configuration
3 message containing information to enable the entity to construct protocol headers for the
4 transmitted real-time data.

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